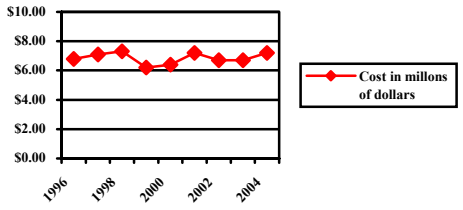
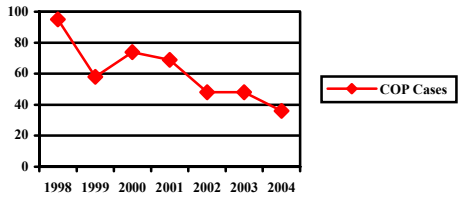
National Aeronautics and Space Administration
Annual Report on Occupational Safety and Health
Executive Summary – FY 2004

Statistics:

The trend for NASA Workers' Compensation costs has been relatively stable at slightly more than $6.5M. Last year did see a half-million dollar increase from the previous year, a spike which occasionally occurs due to a series of settlements from older claims. This is not a trend. With rapidly increasing costs for medications and medical care, the relative consistency of costs indicates fewer new accidents and less costly accidents for the agency.





The number of Continuation Of Pay (COP) cases decreased, and the amount of COP money decreased from $82K to $55K in FY 2004, while the size of the NASA workforce remained the same.

Unsafe acts continue to be the primary cause of reportable mishaps. The top six definitive groupings of causes for reportable injuries and illnesses at NASA are:

- Walking/working surfaces 21%
- Slips, trips, and falls 15%
- Lifting and moving operations 17%
- Ergonomic 17%
- Bumped into/struck by 16%
- Other miscellaneous 4%*

* Note this event was a researcher preparing incompatible compounds, resulting in an explosion and fire, in which he was injured.

Training:

NASA has continued with an aggressive safety and health training program utilizing a multi-media approach covering a broad range of safety and health topics. Specifics courses conducted for FY 04 include:

- NASA Safety Training Center provided 284 classes from a catalog of 106 safety and health instructor-based courses, Agency wide, to over 5,590 people.
- Site for Online Learning (SOLAR) is a web-based tool that provided training to 1,718 NASA and contractor personnel across various topics.
- NASA Occupational Health web site provided online training and informational resources. In FY 2004, there were 602,061 web page hits.
- 49 individual Occupational Health Video Information Transmissions to all NASA Centers and selected international partners.
- Safety Awareness Days were held at all NASA Centers.

Accomplishments:

Although there were no fatalities in FY 2004, and only a small number of reportable mishaps in FY 2004, NASA continues to work towards achieving world-class safety and health programs and to concentrate efforts in its areas of concern.

In February 2003, the Columbia Accident Investigation Board concluded that NASA's safety climate and culture contributed as much to the Space Shuttle Columbia accident as any mechanical failure. To address the shortcomings, NASA enlisted Behavioral Science Technology Inc. (BST) to lead agency-wide culture change. BST's initial Safety Climate and Culture Survey in February 2004 showed that NASA was ahead of many organizations in its commitment to safety. NASA is making solid, measurable progress in transforming its organizational safety climate and culture, according to the results of a new survey conducted by BST. The NASA culture change initiative is critical to the agency's future, as it prepares for the Space Shuttle program's return to flight, which is currently scheduled for FY 2005.

The NASA Erasmus program (a new executive reporting system and project performance dashboard), includes performance metrics of all NASA Centers, programs, projects, and safety and health activities. Within safety reporting, this includes both Contractor and Government resources. Injury/illness data, damage to government property, and close-call reports are included. Each NASA Center is represented by a green, red or yellow "mouse-over", which indicates current mishap data for that week. All on-duty mishaps are required to be reported within 24 hours to the Administrator. Links are also provided for Agency safety data and safety and mission assurance policy. The Administrator proactively uses this system daily to integrate safety and health into the NASA culture.

It is NASA's policy to offer a comprehensive health services program for international travelers to safeguard the health and productivity of NASA employees on international travel and duty assignments. A new policy was implemented in FY 2004, which requires all NASA international business travelers to be medically screened for fitness for duty travel prior to receiving their travel orders.

In an effort to maximize a healthy and safe work environment, by reducing preventable injury and illness through improved OH awareness, NASA is currently developing an Electronic Health Record System (EHRS).

The NASA Safety Directors and Occupational Health Managers Meeting held their annual joint meeting in Cocoa Beach, Florida, in FY 2004. The meeting was held to present the status of Agency safety and occupational health programs and policies and addressed current topics and emphasis areas of health and safety.

New Agency-wide policy requirements were established for outdoor laser operations.

A major audit and self-evaluation process was continued in FY 2004. The course of action included 12 Agency-level reviews of 10 NASA Centers for Occupational Safety and Health, Operational Engineering Panel reviews, Center VPP preparation reviews, and industry best practices.

To date, six NASA installations have achieved OSHA VPP Star Certification and recertification status: Langley Research Center, Johnson Space Center, Ames Research Center, Sonny Carter Training Facility, White Sands Test Facility and Kennedy Space Center. All other Centers are aggressively pursuing preliminary OSHA VPP Star certification.

NASA developed a formal Automated External Defibrillator (AED) policy for the Agency, and has made a significant effort to distribute AEDs at the Centers. In FY 2000, NASA had 49 AEDs and by FY 2002 that number more than doubled to 128 AEDs. In 2003, that number rose to 151, and then rose again

in FY 2004 to 276 AEDs. NASA has deployed AEDs at all NASA Centers and personnel have been trained to use them. Since deploying the AEDs, five lives have been saved.

NASA mentored the Yosemite National Park Service (NPS) with the NASA Performance Evaluation Profile (PEP) survey, so that the NPS could identify strengths and weaknesses in their safety and health program; allowing them to work towards achieving OSHA VPP status. In this process, NASA has also learned "best practices" from those we are assisting in bettering their internal programs, through participation with the Federal Advisory Council on Occupational Safety and Health, the Federal Round Table, and through assistance provided by the Office of Federal Agency Programs.

All physicians and nurses at all NASA Centers have achieved the goal of Advanced Cardiac Life Support (ACLS) certification.

Goals:

The Safety, Health, and Return to Employment (SHARE) goals for 2005 and 2006 are to decrease injuries by 3% per year, increase timeliness of reporting by 5% each year, and decrease the Lost Production Days by 1% per year from the 2003 baseline.

The occupational safety and health audit and self-evaluation process will continue in FY 2005. Ten health and safety audits are planned for NASA Centers to review their compliance with OSHA and industry best practices and standards.

NASA is currently developing an Electronic Health Record System (EHRS). The goal of the EHRS is to utilize health information technology to improve the recognition and documentation of workplace health hazards and adverse health outcomes associated with occupational exposure and non-occupational lifestyles. Through better information management, NASA OH will improve the continuum of care offered to its workforce from proactive intervention and education prior to an event, to effective rehabilitation and return to normal productive activity after an unforeseen injury or illness. NASA will begin implementation of this system in FY 2005.

The NASA Occupational Health Conference will be held in June 2005 and will include professional development courses for occupational health physicians, occupational health nurses, and industrial hygienists.

NASA will hold its annual joint 2006 Safety and Health Manager's meeting.

Other goals include rolling out the Incident Reporting Information System (IRIS) EX3 web-based application for full implementation of its capability; focusing mishap investigations on root cause to help assure mishap prevention at a more granular level; endorsing safety and health stand down days at NASA Centers to help assure improvement in health and safety culture; continuing to strive to achieve world class safety and health programs; and return to full flight operations in a safe manner.